
Mankind is changing the chemistry of the oceans and may be causing a mass extinction of sea life. Experts say carbon dioxide from modern society has already made the ocean more acidic than at any time in the past half-million years. Environment analyst Roger Harrabin reports:

Carbon dioxide is an acidic gas and scientists say as it dissolves into the sea it's making seawater more acidic. They calculate that ocean acidity is up 30% since the Industrial Revolution. A new study shows the growth of some tiny **shell forming creatures** appears already to have been **stunted** by the change.

Research of this new branch of science suggests that as CO2 emissions continue to increase, many shell forming **species** may not survive the next 50 - 100 years. This would **hit commercial fisheries** and start **to unpick the very web** of life in the seas.

Dr Carol Turley, who is running today's **acidification debate** in Copenhagen, fears a **mass extinction**: "55 million years ago there was a big production of CO2. That resulted in the mass extinction of **seabed dwelling** shell forming **organisms**. What we're doing now is far, far faster, so it may not be possible for organisms to adapt."

Sceptics say we can't be sure how ocean chemistry will respond in the future and whether creatures will adapt. The scientists in Denmark say we simply shouldn't take the risk.

Roger Harrabin, BBC News, London

Vocabulary and definitions

shell forming creatures	animals which make their own protective coverings often called 'shells'
stunted	stopped from growing or developing to full potential
species	group of animals or plants which have similar characteristics
hit commercial fisheries	have a negative effect on the fishing industry
to unpick the very web	to destroy the delicate balance
acidification debate	discussion on the environmental issues caused by acid and pollution
mass extinction	a large number of animals and sea life will no longer exist
seabed dwelling	animals or creatures who live at the bottom of the ocean
organisms	very small single living plants or animals (we often use this word when talking about extremely small forms of life e.g. amoebae and bacteria are single-celled organisms)
sceptics	people who doubt, who don't believe

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